Nuclear Regulatory Commission's Nuclear Export/Import Licensing Program

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Objective

Discuss:

- NRC's roles and responsibilities
- What NRC licenses
- How decisions are made

NRC's Statutory Authority Atomic Energy Act of 1954, As Amended

Nuclear Materials

- **Source** natural or depleted uranium, thorium or ores that contain by weight 0.05 percent or more of the source material
- **Special nuclear** plutonium, uranium –233, or enriched uranium
- **Byproduct** yielded in or made radioactive by exposure to radiation

NRC's Statutory Authority

Equipment – "Major" Components

- **Reactors** including items within or attached directly to the reactor vessel (e.g., pressure vessels, fuel loading & discharging machines, complete control rod systems, primary coolant pumps)
- Fuel cycle facilities
- Components especially designed or prepared for use in the above

NRC's Statutory Authority

Equipment – "Minor" Components

- Reactor pressure tubes
- Zirconium tubes for reactor use
- Reactor internals core support structures, guide tubes
- Steam generators
- Items especially designed or prepared for use in balance of plant or in components listed above

Interagency Reviews

NRC is consulted regarding:

Agreements for Peaceful Nuclear Cooperation

Subsequent Arrangements (retransfers)

• Nuclear technology transfers (10 CFR 810)

NRC Export/Import Regulations 10 CFR Part 110

- Reflect AEA requirements
- Establish criteria for approving exports/imports
- Indicate types of public notice & levels of review
- Define possible terms & conditions for general & specific licenses

Criteria for "Major" Nuclear Exports

- Agreement for Cooperation
- Peaceful use only
- Adequate physical security
- USG approval prior to:
 - Subsequent retransfer
 - Alteration in form (reprocessing)
- Full-scope IAEA safeguards in recipient NNWS
- No harm to US common defense and security

Criteria for "Minor" Nuclear Exports

Full-scope IAEA safeguards in NNWS

Peaceful use only

US approval prior to retransfer

No harm to US common defense and security

NRC Export/Import License Types

General Licenses

- No "piece of paper" this is a license, not an exemption or waiver
- For exports, limited to specific items that do not pose public health or proliferation risk:
 - -Small quantities of uranium, plutonium, tritium
 - -Dispersed sources of tritium
 - Most reactor-produced radionuclides
 - -Minor reactor components to selected list of countries

NRC Export/Import License Types

General Licenses (Continued)

 Imports of source or special nuclear materials, or byproduct materials not listed in Appendix P, if US recipient is authorized to possess the material

NRC Export/Import License Types

Specific Licenses

- Application (NRC Form 7) with names & addresses of U.S.
 & foreign parties, descriptions of commodities to be exported or imported & processing fee must be submitted to NRC
- Consultations with interested U.S. & foreign government agencies initiated to determine whether applicable criteria are met
- If criteria are met, a formal license document ("piece of paper") is issued

NRC Application Review Process

- All applications received must be made available to the public, some require <u>Federal Register</u> notices (see 10 CFR 110.70 and 110.80 through 82)
- Many exports require US govt. to obtain assurances from foreign govt. agreeing to peaceful use and other criteria
- Some exports require reviews by interested Executive Branch agencies, which is coordinated by Department of State (see 10 CFR 110.41)

Application Review Process

- Radioactive waste exports/imports reviewed by EPA, affected States & LLW Compacts
- Certain specified applications reviewed by Commission (see 10 CFR 110.40)
- Licenses either issued or denied, unless application withdrawn or returned without action

NRC Export/Import Actions

- NRC processes approximately 100 non-Appendix P export and/or import applications per year
- Appendix P became effective on December 28,
 2005. Thus far, approximately 50 applications received.

10 CFR 110 Periodically Revised

- Lists of "Embargoed" or "Restricted" destinations changed if directed by Executive Branch (see 10 CFR 110. 28 and 110.29)
- Provisions added to enhance controls and accountability for radioactive sources of concern (Appendix P added to Part 110)
- Changes due to Energy Policy Act of 2005 (radium-226 sources and accelerator produced material added to NRC jurisdiction effective in August 2006)
- Changes to implement use of new NRC Form 7 (expands scope to imports and license amendment requests, will be effective later this year)

For additional information:

Info on Office of International Programs:

www.nrc.gov/who-we-are/organization/oipfuncdesc.html

Info on Export-Import Licensing:

www.nrc.gov/what-we-do/ip/export-import.html

Info on Appendix P related export-import licenses:

www.nrc.gov/what-we-do/ip/final-part110.html